

**Notice of Allowability**

Application No.

10/018,863

Examiner

Edward Raymond

Applicant(s)

ZAMZOW, BERT

Art Unit

2857

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Pre-Amendment filed 4/9/02.
2. ☒ The allowed claim(s) is/are 11-28.
3. ☒ The drawings filed on 09 April 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### *Allowable Subject Matter*

1. **Claims 11-28** are allowed.
2. The following is an examiner's statement of reasons for allowance: Wilson et al. teach a method of determining the location of splices and of calculating power loss at splices in optic fibers in a cable. The prior art of record does not teach a method for determining the loss of a splice connecting two optical waveguides by executing the following steps: a) determining or describing a first spatial distribution of the refractive index ( $n(r)$ ) inside a first spatial region, not influenced by the splice, of a first optical waveguide, b) determining a second spatial distribution ( $n(r)$ ) of the refractive index in the region of the splice, c) deriving a first field function ( $E(z_0)$ ) from the first spatial distribution ( $n_0(r)$ ) of the refractive index, the first field function ( $E(z_0)$ ) describing the spatial dependence of the electric field of a mode that can propagate in the waveguides, d) calculating a second field function ( $E(z_n)$ ) from the first field function ( $E(z_0)$ ) and the second spatial distribution of the refractive index ( $n(r)$ ), the second field function ( $E(z_n)$ ) describing the spatial dependence of the electric field, the mode propagating from the first spatial region via the splice, within a second spatial region, not influenced by the splice, of the second optical waveguide, e) calculating a first intensity ( $I(z_0)$ ) and a second intensity ( $I(z_n)$ ) from the assigned field functions ( $E(z_0)$ ,  $E(z_n)$ ), and f) calculating the loss ( $L$ ) of the splice occurring as a function of the ratio of the two intensities ( $I(z_0)$ ,  $I(z_n)$ ).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wilson et al. teach a method of determining the location of splices and of calculating power loss at splices in optic fibers in a cable. Wilde et al. teach a method and system for suppressing spurious reflections.

***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Raymond whose telephone number is 571-272-2221. The examiner can normally be reached on Monday through alternating Friday between 8:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-2221 for regular communications and 571-272-1562 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

Application/Control Number: 10/018,863  
Art Unit: 2857

Page 4

October 25, 2004  
Edward Raymond  
Patent Examiner  
Art Unit 2857

A handwritten signature in black ink, appearing to read "Edward Raymond". The signature is written in a cursive style with a large, prominent loop at the end of the last name.